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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/922,468	08/03/2001	Patrick M.Y. Waye	74430P001	7184

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EXAMINER

AMINZAY, SHAIMA Q

ART UNIT	PAPER NUMBER
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2684

DATE MAILED: 03/26/2004

2/

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/922,468

Applicant(s)

WAYE ET AL.

Examiner

Shaima Q. Aminzay

Art Unit

2684

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 August 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

Detailed Action

1. This is the first action, application filed on 08/03/2001.
2. Independent Claims 1, 11, and dependent claims 2-9, and 12-23 are pending in the case.
3. The present title of the application is "Method and configuration for transmitting data in a motor vehicle"

NONE FINAL ACTION

Claim Rejections – 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) Patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 1-7, and 9-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Purchase et al. U. S. Patent Number 5432838, in view of Graham et al. U. S. Patent Number 5697067.
2. Regarding claims 1, and 11, Purchase discloses a radio frequency communication system for communicating radio frequency data signals containing data to and from remotely located data devices (Figure 1, column 1, lines 10-15, Abstract, lines 1-13), said system comprising: a radiating transmission line (see for example column 1, lines 53-60, column 4, lines 53-57,

column 21, lines 8-10, and Abstract, lines 1-4); a head end unit (2, Figure 1) comprising a system server (computer, 8), said head end unit being coupled to a first end of the transmission line (12), and the amplifiers (30 and 32) are connected to the transmission line (12) for amplifying the data signals (column 8, lines 7-30), and demodulating signals (column 12, lines 53-55), and transmission of radio signals to remotely located devices (see for example sections such as Mobile Voice Radio, Column 11, starting line 32; Mobile Data Acquisition, column 17, starting line 40; Mobile Video, column 18, starting line 22).

However, Purchase does not specifically the regenerated data signal is transmitted through the radiating transmission line at a power level permitting transmission and radiation of the regenerated radio frequency data signal to the remotely located data devices within a coverage area of the regeneration amplifier.

Graham discloses the data signal is transmitted through the radiating transmission line at a power level permitting transmission and radiation of the regenerated radio frequency data signal to the remotely located data devices within a coverage area (see for example, Abstract, lines 10-21, and column 2, lines 39-59).

It would have been obvious to one of ordinary skill in the art at the time invention was made to combine Graham's radiated transmission line amplification with Purchase's radio communication system to provide a radio frequency communication system particularly for underground with the

broadband distribution (Purchase, Abstract, lines 1-2), and it provides "an alternative type of radio frequency communication system which provides for communication of audio and video signals on a single radiating transmission line", and "to provide a radio frequency communication system having multichannel audio communication" (Graham, column 2, lines 1-6).

3. Regarding claims 2, and 12, Purchase and Graham teaches claims 1, 11 and further, Purchase teaches the controller (72, Figure 3) performs error detection and correction (see for example, column 11, lines 60-67).
4. Regarding claims 3, and 13, Purchase and Graham teaches claims 2, 12 and further, Purchase teaches the amplifier periodically transmits information regarding the data devices within its coverage area to the system server (see for example, Figure 1 computers 4, 6, 8 and 10) of the base unit to permit the system server to account for delays resulting from the regeneration amplifiers (see for example, column 8, lines 4-14).
5. Regarding claims 4, 14, and 15, Purchase and Graham teaches claims 3, 13 and further, Purchase teaches that each data device in the communication system (see Figure 1) has a unique address which can be transmitted through the communication system to the regeneration amplifiers (see for example, 30 and 32), wherein the device for tracking the data devices monitors the unique addresses (see Figure 10) being transmitted by data devices to track the data devices within the coverage area (see for example, column 8, lines 53-57).

6. Regarding claims 5, and 16, Purchase and Graham teaches claims 3, 15 and further, Purchase teaches the system server (Figure 1, see for example element 6) determines a number of data signal to reach a target data device and for an acknowledgement signal to be received by the system server and other combination of activities when sending radio frequency data signals through the transmission line (see for example, column 8, lines 31-43).
7. Regarding claim 7, and 20, Purchase and Graham teaches claims 5, 19, and further, Purchase teaches the data signals have a frequency of between 2 MHz (column 9, line 63) and 200 MHz and a bandwidth of 0.5 MHz to 32 MHz (see for example, column 8, lines 14-23; column 9, lines 4-12, and Table 1).
8. Regarding claim 9, 17, 18, 22, and 23, Purchase and Graham teaches claims 1, 13, and further, Graham teaches transmitting the data signals to the radiating transmission line at a first frequency and receives data signals from the radiating transmission line at a second frequency and further manipulation of the received data (column 2, lines 1-60, and column 4, lines 1-5), and the system uses modem for modulation and demodulation of the signals (column 10, lines 8-15).
9. Regarding claim 6, Purchase and Graham teaches claim 5 and further, Purchase teaches the transmission system server topology and determining the location of the target data device in the topology and transmitting the required signals (column 3, lines 65-68; column 4, lines 42-45; column 19, lines 47-53).
10. Regarding claims 10, and 21, Purchase and Graham teaches claims 1, 20 and further, Purchase teaches the narrow band signals (column 5, lines 48-56) with

selected bandwidth (column 9 and 10, Table 1), and the third and fourth frequencies traveling in different direction (column 2, lines 48-61).

11. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Purchase et al. U. S. Patent Number 5432838, in view of Graham et al. U. S. Patent Number 5697067, in further view of Chapman et al. U. S. Patent Number 6621812.

12. Regarding claim 8, Purchase and Graham teaches claim 5, but do not teach complying with DOCSIS.

Chapman teaches Data Over Cable System Interface Specification (DOCSIS) with the audio and video communication system (column 1, lines 9-11; column 2, lines 14-20; column 4, lines 10-16).

It would have been obvious to one of ordinary skill in the art at the time invention was made to combine Chapman's DOCSIS standard in audio and video communication system with Purchase and Graham radiated transmission line system to provide a communication system that complies with DOCSIS which provides a communication system incorporating Voice Activity Detection (VAD) that reduces bandwidth usage into a scheduled access media while also reducing VAD induced latency.


Conclusion

1. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure
2. Knop et al. Radiating Coax Cable Having HDS and Radio Com. Sys.

Inquiry

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shaima Q. Aminzay whose telephone number is 703-305-8723. The examiner can normally be reached on 7:00 AM -5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nay Maung can be reached on 703-308-7745. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9314. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the TC 2600's customer service telephone number is 703-305-3900.


Shaima Q. Aminzay
(Examiner)


NAY MAUNG
SUPERVISORY PATENT EXAMINER

Nay Maung
(SPE)
Art Unit 2684

March 8, 2004